AMENDMENT

Please cancel claims 91-96, 103-108, 116-122, 125-132, 134, and 135.

REMARKS

In the Office Action dated August 19, 2002, claims 91-96, 103-108, 116-122, 125-132, 134, and 135 were found to be allowable in the application. These claims were filed in a continuation application that was filed on October 21, 2002, and therefor should be cancelled from this application. Thus, claims 97-102, 109, 112-114, 123, and 137-143 are pending. A copy of the pending claims is provided in Appendix A. A copy of the filed Appeal Brief, in which this Amendment is referenced, is included for the Examiner's convenience.

The Examiner is invited to contact the undersigned attorney at (512) 536-3081 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

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APPENDIX A:

Pending Claims

- 97. A process of screening a substance for its ability to specifically bind to an opioid receptor, said process comprising the steps of:
 - a) expressing a recombinant opioid receptor polypeptide encoded for by a nucleic acid sequence comprising at least 30 contiguous bases of SEQ ID NO:11;
 - b) contacting said substance with the opioid receptor polypeptide; and
 - c) detecting the ability of said substance to specifically bind to said opioid receptor polypeptide.
- 98. The process of claim 97, wherein said opioid receptor polypeptide is encoded for by a nucleic acid sequence comprising at least 40 contiguous bases of SEQ ID NO:11.
- 99. The process of claim 98, wherein said opioid receptor polypeptide is encoded for by a nucleic acid sequence comprising at least 50 contiguous bases of SEQ ID NO:11.
- 100. The process of claim 99, wherein said opioid receptor polypeptide is encoded for by a nucleic acid sequence comprising at least 75 contiguous bases of SEQ ID NO:11.
- 101. The process of claim 100, wherein said opioid receptor polypeptide is encoded for by a nucleic acid sequence comprising at least 100 contiguous bases of SEQ ID NO:11.
- 102. The process of claim 101, wherein said opioid receptor polypeptide is encoded for by a nucleic acid sequence comprising at least 680 contiguous bases of SEQ ID NO:11.
- 109. A process of isolating a substance with an ability to act as a specific agonist of a kappa opioid receptor, said process comprising the steps of:

- a) providing an opioid receptor polypeptide comprising the second extracellular loop comprising the amino acid sequence of residues 111 through 136 of SEQ ID NO:12 and encoded for by a nucleic acid sequence comprising at least 30 contiguous bases of SEQ ID NO:11;
- b) contacting said opioid receptor polypeptide with a composition comprising said substance;
- c) detecting the ability of said substance to bind to said opioid receptor polypeptide; and
- d) isolating said substance if the ability of said substance to specifically bind to the opioid receptor polypeptide is detected.
- 112. The process of claim 109, wherein said opioid receptor polypeptide is encoded for by a nucleic acid sequence comprising at least 75 contiguous bases of SEQ ID NO:11.
- 113. The process of claim 112, wherein said opioid receptor polypeptide is encoded for by a nucleic acid sequence comprising at least 100 contiguous bases of SEQ ID NO:11.
- 114. The process of claim 113, wherein said opioid receptor polypeptide is encoded for by a nucleic acid sequence comprising at least 680 contiguous bases of SEQ ID NO:11.
- 123. The process of claim 143, wherein said opioid receptor polypeptide is a kappa opioid receptor polypeptide encoded for by the polynucleotide of SEQ ID NO: 11.
- 137. A process of screening a substance for its ability to act as a specific agonist of a kappa opioid receptor comprising:
 - a) expressing a chimeric recombinant opioid receptor polypeptide comprising the second extracellular loop comprising the amino acid

sequence of residues 111 through 136 of SEQ ID NO:12, wherein said chimeric opioid receptor polypeptide is encoded by a nucleic acid sequence comprising 30 contiguous bases of SEQ ID NO:11;

- b) contacting said substance with the opioid receptor polypeptide; and
- c) detecting the ability of the substance to specifically bind to the opioid receptor polypeptide.
- 138. The process of claim 137, wherein said nucleic acid sequence comprises 40 contiguous bases of SEQ ID NO:11.
- 139. The process of claim 137, wherein said nucleic acid sequence comprises 55 contiguous bases of SEQ ID NO:11.
- 140. The process of claim 137, wherein said nucleic acid sequence comprises 70 contiguous bases of SEQ ID NO:11.
- 141. The process of claim 137, wherein a portion of the chimeric opioid receptor polypeptide comprises SEQ ID NO:14.
- 142. The process of claim 137, wherein the chimeric opioid receptor polypeptide comprises polypeptide portions of both kappa and delta opioid receptors.
- 143. The process according to claim 97 wherein the opioid receptor polypeptide is a kappa opioid receptor polypeptide comprising SEQ ID NO:12.